

- ☒ Original  
☐ Continuation  
☐ Division  
☐ Continuation-in-part  
☐ Supplemental

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

# STIRLING/PULSE TUBE HYBRID CRYOCOOLER WITH GAS FLOW SHUNT

the specification of which

(check one) ☒ is attached hereto.

☐ was filed on \_\_\_\_\_ as Application Serial No. \_\_\_\_\_ and (a) [other than supplemental] was amended on or (b) [supplemental] with amendments through \_\_\_\_\_.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

NONE \_\_\_\_\_ Priority Claimed  
Number Country Day/Month/Year Filed ☐ Yes ☐ No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (patented, pending, abandoned)
------------------------	-------------	--

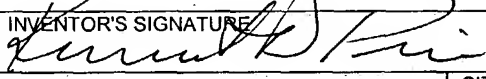
I hereby appoint the following attorneys, or agent and attorneys, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

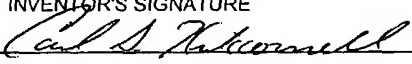
Colin M. Raufer,	Registration No. 40,781
Leonard A. Alkov,	Registration No. 30,021
Glenn H. Lenzen, Jr.,	Registration No. 29,320

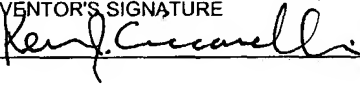
Address all telephone calls to **Colin M. Raufer, (310) 647-3214**.

Address all correspondence to **Raytheon Company, Patent Docket Administration**, P.O. Box 902, Bldg E1, M.S. E150, 2000 E. El Segundo Boulevard, El Segundo, California 90245-0902.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF SOLE OR JOINT INVENTOR <b>Kenneth D. Price</b>	INVENTOR'S SIGNATURE 	DATE <b>7/24/2003</b>
RESIDENCE (CITY AND STATE) Long Beach, California	CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS 3706 Cerritos Avenue, Long Beach, California 90807		

FULL NAME OF SOLE OR JOINT INVENTOR <b>Carl S. Kirkconnell</b>	INVENTOR'S SIGNATURE 	DATE <b>7/22/03</b>
RESIDENCE (CITY AND STATE) Huntington Beach, California	CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS 6741 Brentwood Drive, Huntington Beach, California 92648		

FULL NAME OF SOLE OR JOINT INVENTOR <b>Ken J. Ciccarelli</b>	INVENTOR'S SIGNATURE 	DATE <b>7-22-03</b>
RESIDENCE (CITY AND STATE) Huntington Beach, California 92646	CITIZENSHIP U.S.A.	
POST OFFICE ADDRESS 16412 Oakmont Lane, Huntington Beach, California 92647		